

AD-A184 285 ENVIRONMENTAL ASSESSMENT: TAILWATER WEST TAIL AND 1/1  
PROJECT: SOLE SOURCE OF CAROLVILLE RESERVOIR, JOHNSON

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ENVIRONMENTAL ASSESSMENT: TAILWATER WEST TRAIL AND  
PROJECT: SOLE SOURCE OF CAROLINA RESERVOIR, JOHNSON

FRTSBEE GOLF COURSE AT CUMLEYVILLE RESERVOIR JOHNSON  
COUNTY IOWA(U) ARMY ENGINEER DISTRICT ROCK ISLAND IL

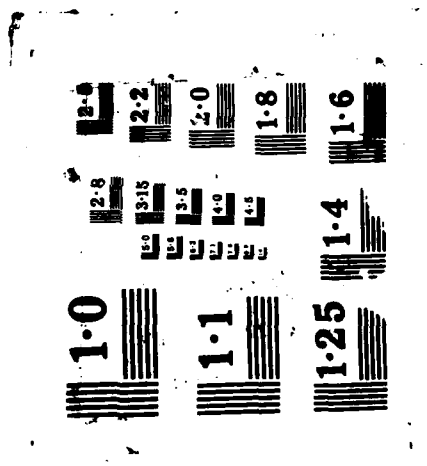
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AD-A184 285

# ENVIRONMENTAL ASSESSMENT

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## TAILWATER WEST TRAIL AND FRISBEE GOLF COURSE AT CORALVILLE RESERVOIR JOHNSON COUNTY, IOWA

AUGUST 1986



US Army Corps  
of Engineers  
Rock Island District

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ENVIRONMENTAL ASSESSMENT

TAILWATER WEST TRAIL  
AND  
FRISBEE GOLF COURSE  
AT  
CORALVILLE RESERVOIR  
JOHNSON COUNTY, IOWA



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AUGUST 1986

## ENVIRONMENTAL ASSESSMENT

### TAILWATER WEST TRAIL AND FRISBEE GOLF COURSE AT CORALVILLE RESERVOIR JOHNSON COUNTY, IOWA

#### TABLE OF CONTENTS

| <u>Subject</u>  | <u>Page</u> |
|---|-------------|
| I. Purpose and Need for Action  | EA-1        |
| II. Project Description   | EA-1        |
| III. Alternatives   | EA-1        |
| IV. Affected Environment  | EA-2        |
| V. Environmental Consequences of the Preferred Action   | EA-2        |
| VI. Environmental Impacts of Nonpreferred Alternatives  | EA-5        |
| VII. Probable Adverse Environmental Effects Which Cannot Be Avoided   | EA-5        |
| VIII. Relationship Between Short-Term Use of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity        | EA-5        |
| IX. Any Irreversible or Irretrievable Commitments of Resources Which Would be Involved if the Proposed Action Should be Implemented | EA-5        |
| X. Relationship of the Proposed Project to Land-Use Plans   | EA-5        |
| XI. Compliance with Environmental Quality Statutes  | EA-6        |
| XII. Conclusions  | EA-6        |
| Finding of No Significant Impact (FONSI)  | EA-8        |

| <u>No.</u> | <u>Title</u>  | <u>Page</u> |
|------------|---|-------------|
| EA-1       | Effects of the Recommended Plan on Natural and Cultural Resources                               | EA-3        |
| EA-2       | Relationship of Plans to Environmental Protection Statutes and Other Environmental Requirements | EA-7        |

TABLE OF CONTENTS (Cont'd)

List of Plates

| <u>No.</u> | <u>Title</u>                  |
|------------|-------------------------------|
| 1          | General Study Map             |
| 2          | Tailwater West Trail Site Map |
| 3          | Frisbee Golf Course Site Map  |

List of Appendixes

Appendix A - Pertinent Correspondence

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## ENVIRONMENTAL ASSESSMENT

### TAILWATER WEST TRAIL AND FRISBEE GOLF COURSE AT CORALVILLE RESERVOIR JOHNSON COUNTY, IOWA

#### I. PURPOSE AND NEED FOR ACTION.

The project sites are located at Coralville Reservoir, Johnson County, Iowa (see plate 1, general vicinity map). The reservoir was authorized by Section 4 of the Flood Control Act of 28 June 1938 and placed in operation in 1958. Its major purpose is for flood protection; however, recreation is an important secondary benefit, and a large number of developed recreational areas are located at the reservoir.

The proposed projects are designed to enhance recreational uses at the reservoir. The Tailwater West trail will provide a barrier-free fishing and hiking trail. The area is heavily used, and trail construction will channel foot traffic onto a hardened path. The frisbee golf course will provide additional recreational facilities at an overnight camping and day-use recreational area.

#### II. PROJECT DESCRIPTION.

The Tailwater West trail is located on the west bank of the Iowa River just downstream of the Coralville Dam and Tailwater West Recreation Area. The trail will be 8 feet wide and extend downstream one-half of a mile. It will be surfaced with asphaltic concrete and aligned to avoid damage to the trees. Plate 2 shows the location of the trail.

The frisbee golf course would be located adjacent to the Sugar Bottom Recreation Area. The targets will be augered and concreted in a meadow. Approximately 3 acres of fairway will be mowed between targets. Shrubs and trees will be planted along the fairway for aesthetics and to provide shade. Plate 3 shows the location of the frisbee golf course.

#### III. ALTERNATIVES.

A. No Federal Action - Under this alternative, no action would be taken. Additional recreational opportunities would not be provided, and the existing trail site would not be hardened to compensate for heavy use.

B. Alternative Sites and Alignments - Alternative sites and alignments could be used. However, impacts from any changes are likely to be equal to or greater than the preferred locations listed in the project description.

#### IV. AFFECTED ENVIRONMENT.

The Tailwater West trail alignment is within the riparian zone along the west bank of the Iowa River and consists of common bottomland forested species such as silver maple (Acer saccharinum), box elder (Acer negundo), cottonwood (Populus deltoides), elm (Ulmus sp.), willow (Salix sp.), hackberry (Celtis occidentalis), river birch (Betula nigra), mulberry (Morus sp.), and green ash (Fraxinus pennsylvanica var. subintegerrima).

The frisbee golf course site consists of old field succession. Vegetation is of various grasses (Poaceae family), thistle (Cirsium sp.), goldenrod (Solidago sp.), and blackberry (Rubus sp.). Immature honey locust (Gleditsia triacanthos), red cedar (Juniperus virginiana), cherry (Prunus sp.), elm, silver maple, and box elder are widely scattered throughout the meadow.

#### V. ENVIRONMENTAL CONSEQUENCES OF THE PREFERRED ACTION.

The effects of the preferred plan are summarized in table EA-1.

##### A. Social Impacts of Preferred Alternative.

1. Noise. Minor, temporarily elevated noise levels would occur during construction of the projects. All work would be done on Federal land. No homes, schools, or hospitals are near the project sites, and no significant impacts are expected.

2. Displacement of People. No relocations would be required for the projects.

3. Aesthetic Values. The proposed trail would have a beneficial impact by concentrating foot traffic onto a hardened path and helping to prevent trampling of the surrounding vegetation.

Planting trees and shrubs along the frisbee golf course will be done in part to provide beneficial aesthetic effects. Both projects are compatible with the recreational uses of the area, and no significant impacts to aesthetics are anticipated.

4. Community Cohesion. No effects on community cohesion would be expected due to the project's limited areas of influence.

5. Community Growth. No effects on community growth would be expected.

##### B. Economic Impacts of the Preferred Action.

1. Local Property Values. No effects on property values would be expected.

2. Tax Revenues. No increase in tax revenues would be expected as a result of the proposed recreational enhancement projects.



TABLE EA-1

Effects of the Recommended Plan on  
Natural and Cultural Resources

| <u>Types of<br/>Resources</u>                               | <u>Authorities</u>   | <u>Evaluation<br/>of Effects</u> <sup>1/</sup> |
|---|--|--|
| Air Quality   | Clean Air Act, as amended<br>(42 U.S.C. 1857h-7 et seq.)   | No violations to air<br>quality standards      |
| Areas of particular<br>concern within the<br>coastal zone   | Coastal Zone Management Act of 1972,<br>as amended (16 U.S.C. 1451 et seq.)  | Not present in<br>planning area                |
| Endangered and<br>threatened<br>species critical<br>habitat | Endangered Species Act of 1973, as<br>amended (16 U.S.C. 1531 et seq.)   | No effect                                      |
| Fish and wildlife<br>habitat                                | Fish and Wildlife Coordination Act<br>(16 U.S.C. 661 et seq.)  | No significant effect                          |
| Floodplains   | Executive Order 11968, Flood Plain<br>Management   | No significant effect                          |
| Historic and<br>cultural<br>properties                      | National Historic Preservation Act<br>of 1966, as amended (16 U.S.C. 470<br>et seq.)   | No adverse effects<br>anticipated              |
| Prime and unique<br>farmland                                | CEQ Memorandum of 1 August 1980;<br>Analysis of Impacts on Prime or<br>Unique Agricultural Lands in<br>Implementing the National<br>Environmental Policy Act | No significant effect                          |
| Water quality   | Clean Water Act of 1977, as amended<br>(33 U.S.C. 1251 et seq.)  | No violations<br>anticipated                   |
| Wetlands  | Executive Order 11990, Protection of<br>Wetlands, Clean Water Act of 1977,<br>as amended (42 U.S.C. 1857h-7 et seq.)   | No effect                                      |
| Wild and scenic<br>rivers                                   | Wild and Scenic Rivers Act, as<br>amended (16 U.S.C. 1271 et seq.)   | Not present in<br>planning area                |

<sup>1/</sup> If a type of resource is not present in the planning area, enter "Not present in the planning area." If a type of resource is not affected, enter "No effect."

3. Public Facilities. The proposed projects would have a positive impact on public facilities by providing enhanced recreational opportunities within the Coralville Reservoir area. With the attractiveness of Coralville recreational sites increased, users will have more enjoyable recreational experiences.

4. Public Services. The recreational enhancement provided by the projects would add to the current attractiveness of the Coralville recreational areas. These recreational areas help to fulfill a portion of the recreational needs of the general public within Johnson County and outlying areas.

5. Regional Growth. No effects on regional growth would be expected. The construction of the proposed projects would help to ensure that the attractiveness of Coralville Reservoir recreational sites will remain great enough to maintain the current level of tourism at the Coralville area.

6. Employment/Labor Force. The projects would not affect the permanent employment or labor force in Johnson County. The projects would, however, temporarily increase area employment during the construction phase.

7. Business and Industrial Activity. No long-term effects on business or industrial activity would result from the projects. The increase in business activity occurring during the construction phase would be absorbed into the area without noticeable effect. The projects would require no business relocations.

8. Farm Displacement. Since the projects are totally on Federal land, no farms would be affected.

C. Environmental Impacts of the Preferred Alternative.

1. Man-Made Resources. Coralville Reservoir is a man-made resource. Recreation associated with the reservoir would be enhanced by the proposed projects.

2. Natural Resources. Vegetation within the trail alignment will be destroyed. However, impacts will be minimized by following portions of already worn paths and by aligning the trail to avoid the loss of trees. The construction of the trail also will help concentrate foot traffic onto a hardened path and prevent damage to adjacent ground cover. No significant impacts are therefore anticipated.

The frisbee golf course will result in approximately 3 acres of old field succession being mowed on a routine basis. This will impact potentially valuable cover and nesting habitat for small mammals and birds. However, the plantings of trees and shrubs along the borders of the frisbee golf course will offset the initial impacts by creating additional edge effect habitat for wildlife. No significant impacts to natural resources are therefore anticipated.

3. Air Quality. Minor, temporary impacts from dust and exhaust of machinery would occur during construction.

4. Water Quality. Minor, temporary increases in turbidity from runoff of disturbed ground at construction sites may occur until the sites are revegetated.

5. Endangered Species. The peregrine falcon (Falco peregrinus) is the only federally listed threatened or endangered species listed for Johnson County, Iowa. The county is listed as having potential breeding areas for the falcons, although now there are no current active breeding sites in Iowa. No prime or unique habitat exists for the peregrine falcon at the project sites, and no impacts are anticipated.

6. Cultural Resources. Both the Sugar Bottom and Tailwater West areas have been checked for cultural resources on several occasions, most recently by Great Lakes Archaeological Research Center staff (1985 and 1986). Landscaped and degraded contexts have been identified for both project areas. No significant sites would be affected.

#### VI. ENVIRONMENTAL IMPACTS OF NONPREFERRED ALTERNATIVES.

A. No Federal Action. No initial temporary impacts from construction activities would occur. The benefits from hardening the Tailwater West trail to prevent wear by heavy foot traffic also would not be realized.

B. Alternative Sites. The impacts of locating the facilities at other sites would be similar to or greater than those in the proposed areas.

#### VII. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED.

Exhaust and dust emissions from construction equipment would be unavoidable. Vegetative losses at project sites also would be unavoidable.

#### VIII. RELATIONSHIP BETWEEN SHORT-TERM USE OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY.

Both the short-term and long-term uses of the project sites are for recreation. The proposed actions would not result in any significant long-term changes to the environment.

#### IX. ANY IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IF THE PROPOSED PROJECT SHOULD BE IMPLEMENTED.

The purchase of materials and the commitment of manhours, fuel, and machinery to perform the projects would be irretrievable.

#### X. RELATIONSHIP OF THE PROPOSED PROJECT TO LAND-USE PLANS.

The proposed projects are recreational in nature and will be located on lands zoned for that purpose.

## XI. COMPLIANCE WITH ENVIRONMENTAL QUALITY STATUTES.

A summary of compliance can be found in table EA-2.

A. Endangered Species. The peregrine falcon (Falco peregrinus) is the only species listed for Johnson County, Iowa. Verbal communication with the U.S. Fish and Wildlife Service has determined that there would be no impacts to the falcon.

B. Cultural Resources. No significant cultural resources are located in the project areas. Hence, a determination of No Effect is warranted. Previous coordination with the State Historic Preservation Officer concerning recreational areas resulted in clearances based upon the results of Great Lakes Archaeological Research Center investigations. A letter relating to this effect from the Iowa State Historical Department, Office of Historic Preservation, dated November 13, 1985, can be found in Appendix A-Pertinent Correspondence.

C. Federal Water Project Recreation Act. The proposed projects are intended to enhance recreation at Coralville Reservoir.

D. Fish and Wildlife Coordination Act. Biologists from the U.S. Fish and Wildlife Service and the Iowa Department of Natural Resources were consulted during the preparation of this Environmental Assessment. No significant impacts to fish and wildlife resources are expected to occur.

E. Wild and Scenic Rivers Act. There are no wild or scenic rivers within the project areas.

F. Executive Order 11988, Flood Plain Management. The frisbee golf course will not affect floodplain management. The Tailwater West trail, by its nature to provide hiking and fishing access along the shoreline of the Iowa River, requires that it be placed within the floodplain.

G. Executive Order 11990, Protection of Wetlands. No wetlands would be adversely affected by this project.

H. Clean Water Act. There will be no discharge of dredged or fill materials into any waters. No significant impacts to water quality are anticipated.

I. Clean Air Act. Minor, temporary impacts of increased dust and exhaust will occur during construction. No air quality standards should be violated.

## XII. CONCLUSIONS.

The proposed projects would provide additional recreational opportunities at Coralville Reservoir. The projects' designs minimize impacts to natural and cultural resources. No significant impacts are anticipated as a result of these projects.

TABLE EA-2

Relationship of Plans to Environmental Protection  
Statutes and Other Environmental Requirements

| Federal Policies   | Compliance      |
|--|-----------------|
| Archeological and Historic Preservation Act, 16 U.S.C. 469, et seq.            | Full Compliance |
| Clean Air Act, as amended, 42 U.S.C. 1857h-7, et seq.                          | Full Compliance |
| Clean Water Act (Federal Water Pollution Control Act), 33 U.S.C. 1251, et seq. | Full Compliance |
| Coastal Zone Management Act, 16 U.S.C. 1451, et seq.                           | Not Applicable  |
| Endangered Species Act, 16 U.S.C. 1531, et seq.                                | Full Compliance |
| Estuary Protection Act, 16 U.S.C. 1221, et seq.                                | Not Applicable  |
| Federal Water Project Recreation Act, 16 U.S.C. 460-1(12), et seq.             | Full Compliance |
| Fish and Wildlife Coordination Act, 16 U.S.C. 611, et seq.                     | Full Compliance |
| Land and Water Conservation Fund Act, 16 U.S.C. 460/-460/-11, et seq.          | Not Applicable  |
| Marine Protection, Research and Sanctuary Act, 33 U.S.C. 1401, et seq.         | Not Applicable  |
| National Environmental Policy Act, 42 U.S.C. 4321, et seq.                     | Full Compliance |
| National Historic Preservation Act, 16 U.S.C. 470a, et seq.                    | Full Compliance |
| Rivers and Harbors Act, 33 U.S.C. 403, et seq.                                 | Full Compliance |
| Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq.         | Not Applicable  |
| Wild and Scenic Rivers Act, 16 U.S.C. 1271, et seq.                            | Not Applicable  |

## NOTES

- a. Full Compliance. Having met all requirements of the statute for the current stage of planning (either preauthorization or postauthorization).
- b. Partial Compliance. Not having met some of the requirements that normally are met in the current stage of planning. Partial compliance entries should be explained in appropriate places in the report and referenced in the table.
- c. Noncompliance. Violation of a requirement of the statute. Noncompliance entries should be explained in appropriate places in the report and referenced in the table.
- d. Not Applicable. No requirements for the statute required compliance for the current stage of planning.

## FINDING OF NO SIGNIFICANT IMPACT

I have reviewed the information provided by this Environmental Assessment, along with data obtained from Federal and State agencies having jurisdiction by law or special expertise, and from the interested public, and find that the Tailwater West trail and the frisbee golf course will not significantly affect the quality of the human environment. Therefore, it is my determination that an Environmental Impact Statement is not required. This determination will be reevaluated if warranted by later developments.

Alternatives considered along with the preferred action include:

- A. No Federal action.
- B. Alternative sites and alignments.

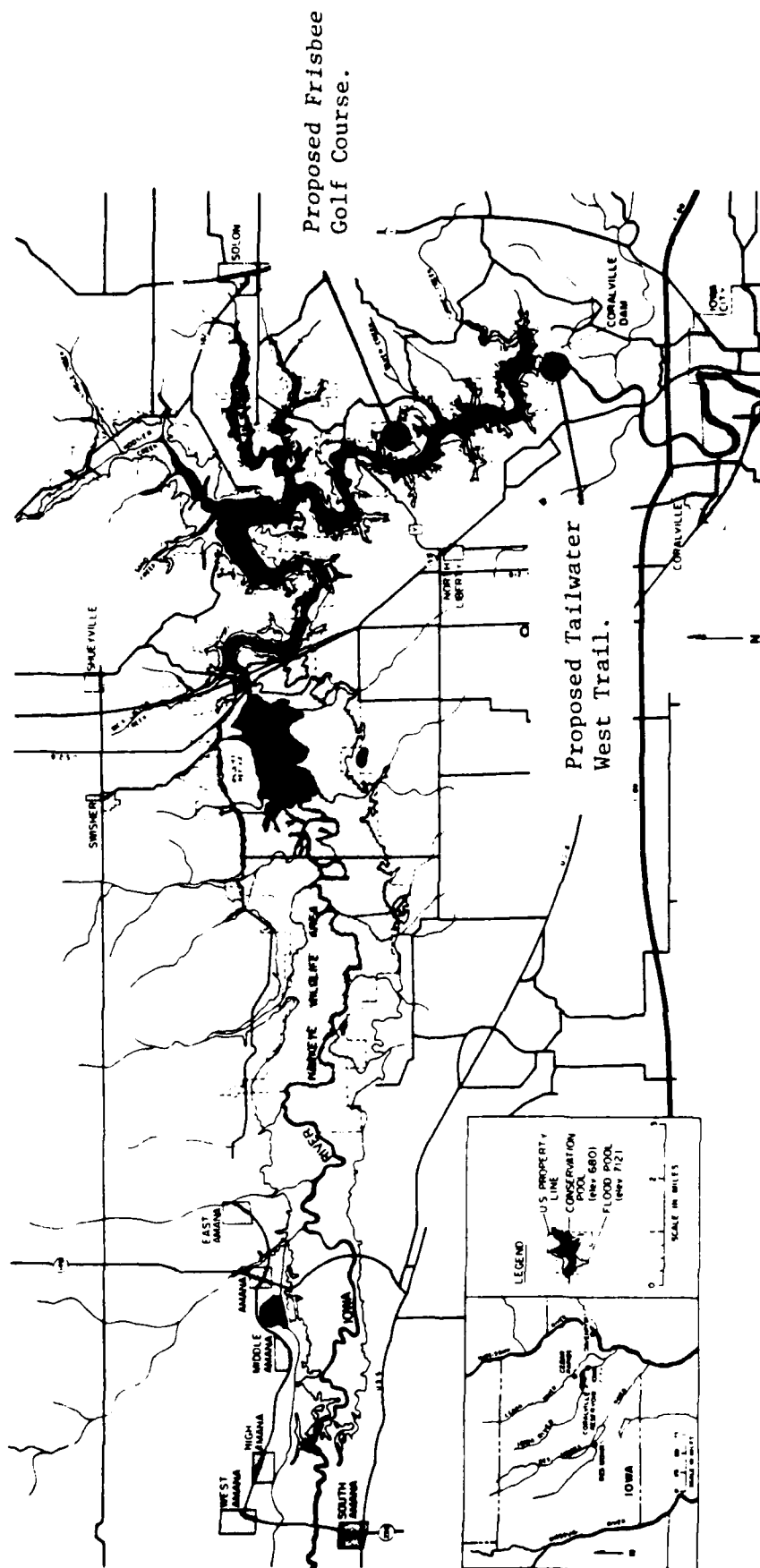
Factors considered in making a determination that an Environmental Impact Statement was not required are as follows:

- A. The projects will enhance recreational uses at Coralville Reservoir.
- B. The projects are designed to minimize impacts resulting from construction.
- C. No significant social, economic, environmental, or cultural impacts are anticipated as a result of these actions.

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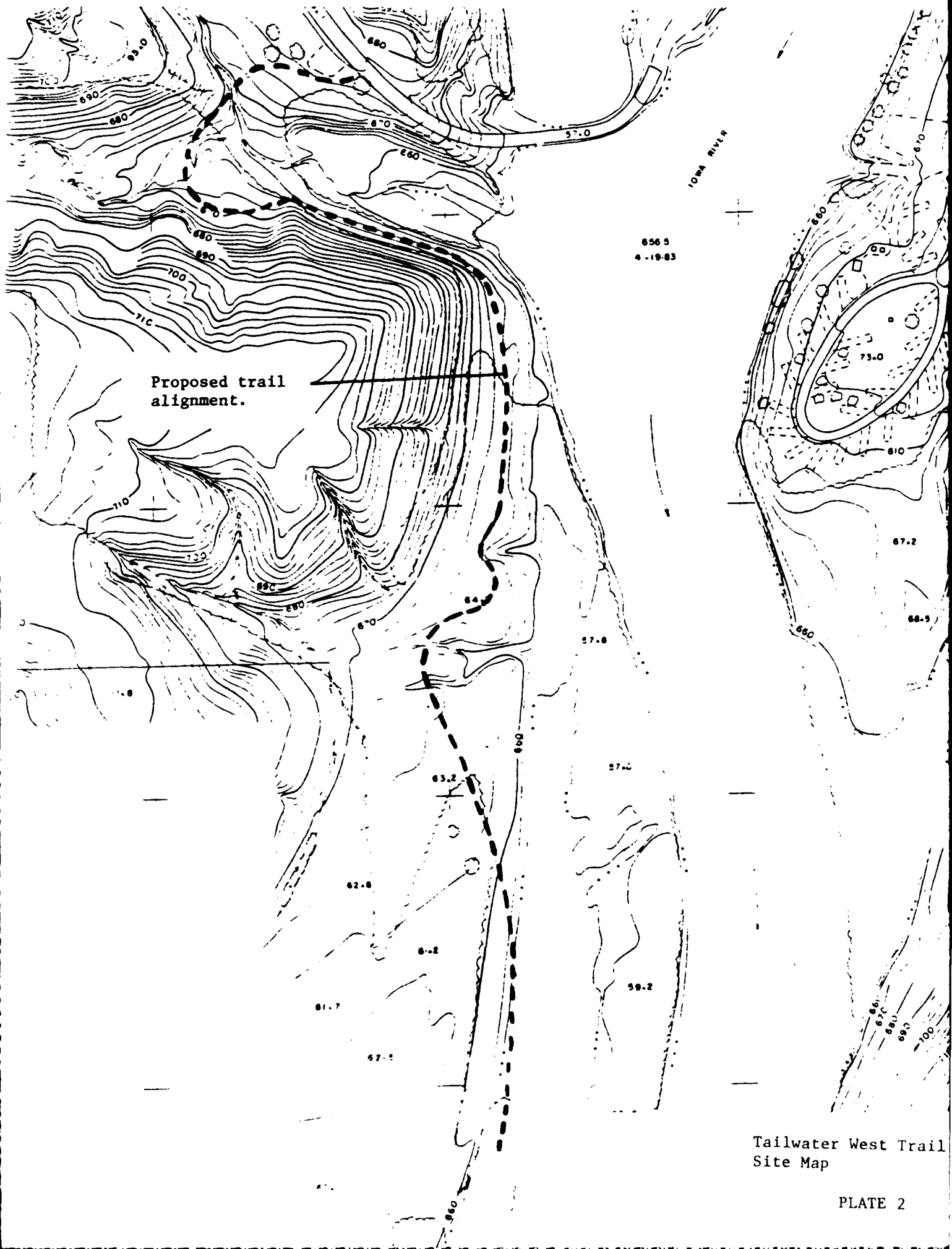
Date

William C. Burns  
Colonel, Corps of Engineers  
District Engineer



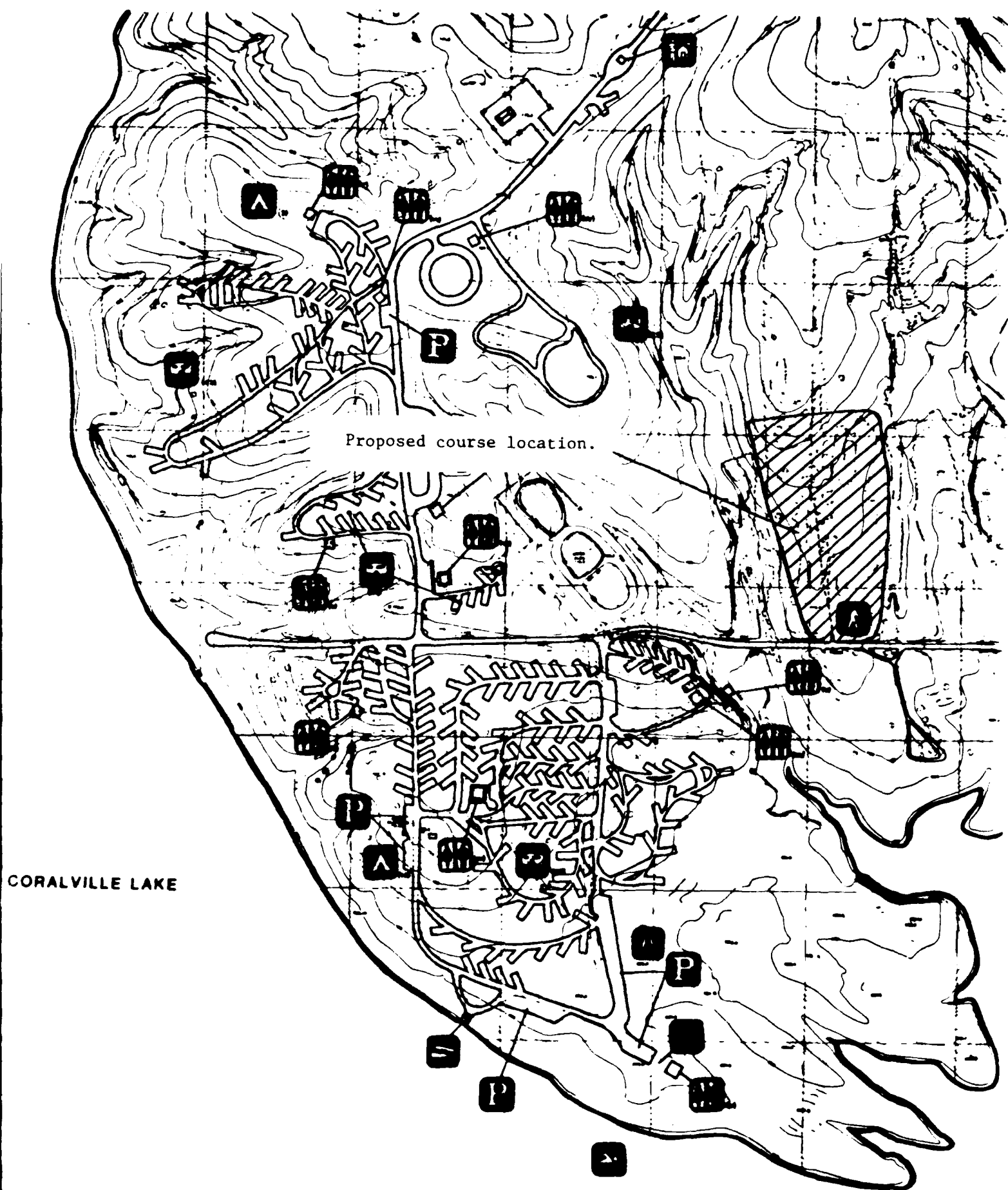
Proposed Frisbee  
Golf Course.

Proposed Tailwater  
West Trail.



Tailwater West Trail  
Site Map





Proposed course location.

CORALVILLE LAKE

Frisbee Golf Course  
Site Map

PLATE 3

PERTINENT CORRESPONDENCE

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**IOWA STATE HISTORICAL DEPARTMENT  
OFFICE OF HISTORIC PRESERVATION**

**DAVID CROSSON, EXECUTIVE DIRECTOR**

November 13, 1985

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
ADRIAN D. ANDERSON, Executive Director  
STATE HISTORIC PRESERVATION OFFICER

District Engineer  
U.S. Army Engineer District, Rock Island  
ATTN: Planning Division  
Clock Tower Building - P.O. Box 2004  
Rock Island, Illinois 61204-2004

RE: THE ARCHAEOLOGY OF CORALVILLE LAKE, IOWA. VOL. IV:  
RECREATION AREA SURVEY (INTERIM REPORT II).

Dear Mr. Hanson:

We have reviewed the above mentioned report and make the following comments and recommendations.

No further work is recommended for the following areas:  
Tailwater West, Tailwater East, West Overlook, Linder Point,  
Mid-River Park, Curtis Bridge, Mehaffey Bridge, and the Hawkeye  
Wildlife Refuge Area.

Future projects at Turkey Creek, Cottonwood, Squire Point, Sandy  
Beach, Lake MacBride State Park and the unsurveyed portions of  
the Hawkeye Wildlife Area need to be assessed for potential  
impacts on unidentified sites in areas where this survey could  
not investigate the ground. This may involve monitoring of  
contruction work or geomorphological investigations. Our office  
should be consulted.

If future developement plans impact sites 13JH359 and 425 (Sugar  
Bottom), additional survey (Phase I) or testing (Phase II)  
investigations must be conducted in order to assess whether the  
sites are eligible for listing on the National Register of  
Historic Places.

The following sites are considered not eligible for listing on  
the National Register and no further work is recommended:  
13JH360 (Linder Point), 13JH361 and 13JH256 (Squire Point),  
13JH55, 106, 115, 117, 124, 125, 126, 202, 234, 238, 257, 262,  
298, 309, 385, and 422 (Sugar Bottom), 13JH27 and 536 (Mid-River  
Park), 13JH (Curtis Bridge), 13JH43, 108, 146, and 396, (Sandy  
Beach), 13JH478 (Mehaffey Bridge), 13JH47, 140, 334, 409, 492,  
524, 525, 526, (MacBride State Park), 13JH527 - 532, 534, and 535  
(Hawkeye Wildlife Refuge), 13JH479 and 13JH457.

The consultant should supply the site number of the Curtis Bridge  
property.

We concur with the archeological contractor that it is futile to continue to investigate previously recorded sites within the "bathtub ring" of the eastern reservoir and on deflated plowed fields. Future fieldwork should investigate landscapes likely to contain undisturbed sites within the COE management area. We thank the COE for initiating a geomorphological survey towards this end and look forward to reviewing that report.

We recommend that the COE and the Iowa Conservation Commission develop a memorandum of agreement for leased lands in the Coralville Reservoir. This MOA should explore arrangements for the protection of known sites that are on or are eligible for listing on the National Register and for the identification of unknown sites which may be eligible for the Register.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lowell J. Soike", written in a cursive style.

Dr. Lowell J. Soike, Director  
Deputy State Historic Preservation Officer

LJS/ks

cc: Dr. David Overstreet, GLARC  
A. J. Klingerman, COE

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